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REMARKS

The Examiner has rejected claims 1 and 8 under 35 U.S.C. 112 on the grounds that the claims contain subject matter not described in the specification.

In particular, the Examiner states that the following element of claim 1 is not supported: "selecting an appropriate forwarding rule based on a source address in said packets <u>and on the incoming service interface from which the packets are received:</u>". As for claim 8, the Examiner states that the following element is not supported: "the multiple route servers for calculating multiple forwarding rules relating to instances of service to which said service interfaces belong based on routing, topology and policing information, the multiple <u>forwarding rules being particular to their respective service interfaces:</u>". However, when this element was added to the claims in the response dated March 13, 2007, the Applicant clearly explained that support was found at lines 14 to 20 of page 31. Support is found elsewhere throughout the description, which clearly explains the relationship between realms, forwarding rules, and service interfaces. For example:

- p. 25 lines 12-16: forwarders use rules appropriate to the realm of the packet
- p. 29 lines 10-14: forwarders learn how to forward traffic for a service interface from the route servers
- p. 30 lines 24-26: routers tell forwarders how service interfaces are bound to realms
- p. 31 lines 10-20: the forwarding information provided by route servers to forwarders includes services interfaces
- p. 43 lines 18-25: realms are autonomous and can have non-unique address spaces
- p. 45 lines 21-25: IP forwarding uses service interfaces
- Figure 1: a clear relationship between realms and service interfaces

The Applicant therefore respectfully submits that the subject matter of claims 1 and 8 is supported by the description as originally filed.

The Examiner has rejected claims 1-8 and 11-21 under 35 U.S.C. 103(a) as being unpatentable over US Patent 6,085,238 issued to Yuasa, US Patent 5,825,772 issued to Dobbins, and US Patent 5,845,091 issued to Dunne.

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Claim 1 includes the feature of selecting an appropriate forwarding rule based on a source address in said packets and on the incoming service interface from which the packets are received. The Examiner states that Dobbins teaches this element at column 17 lines 22-43, but the Examiner's explanation of this passage of Dobbins states only that the forwarding rule is selected based on the source address. Furthermore, this passage does not discuss selecting rules based on the incoming service interface, and in fact does not discuss selecting a forwarding rule at all. The passage, and in fact all of Dobbins, discusses deciding <u>whether</u> to forward a packet to its destination address based on its source address in order to implement VLANs. As argued extensively in response to previous Office Actions, the access rule of Dobbins is not the same as a forwarding rule. No decision of a forwarding rule among multiple forwarding rules based on incoming service interface is made.

The Examiner also states that this element is taught by Dunne at element 1305 of Figure 13, which teaches selecting forwarding rules based on source IP address, by simply amending the previous Office Action to say that Dunne "implicitly discloses forwarding rule is selected by input interface which the packet is received". However, contrary to the Examiner's assertion, there is nothing which implies selecting a forwarding rule based on the incoming service interface from which the packet is received. Dunne teaches only that the forwarding list is selected based on the source IP address (text of box 1305 of Figure 13; column 6 lines 10-12). Dunne does not disclose selecting a forwarding rule based on the incoming service interface, and there is no suggestion in Dunne that this should be done. Referring to Figure 12 and column line 45 to column 6 line 5, it is seen that Dunne distinguishes the originating subnetworks A-F only by their respective IP addresses: "By expanding the criteria of the described function to include the source IP address, a forwarding list may be separately defined for each of the subnetworks A-F". As explained in response to the previous Office Action, Dunne uses different forwarding lists only to establish different routes through the entire network, and not to determine different destinations. There is therefore no need to consider anything other than the source IP address when selecting a forwarding rule, as Dunne considers this sufficient to distinguish the originating subnetworks A-F. In contrast, because claim 1 of the present application considers the incoming service interface from which a packet is received when selecting a

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forwarding rule, distinct and isolated user networks are enabled, and allow each distinct and isolated user network to re-use destination addresses. Selecting an appropriate forwarding rule based on the incoming service interface from which a packet is received is not taught by Dunne or even suggested by Dunne, and is in no way implied by Dunne since Dunne presents no reason why one would want to do this.

The Examiner's rejection based on Dunne is identical to the rejection in the previous Office Action. The Applicant presented arguments in response to the previous Office Action, and the Examiner has not addressed the Applicant's arguments.

Claim 8 includes the limitation of multiple route servers for calculating multiple forwarding rules, the multiple forwarding rules being particular to their respect service interfaces. The Examiner states that Dobbins teaches multiple route servers for calculating multiple forwarding rules, the multiple forwarding rules being particular to their respective service interfaces and edge forwarders at Figure 19, elements 195 and 191. However Figure 19 only shows a network of VLAN access switches (elements 191) and local directories (elements 195). The discussion of Figure 19 from column 20 line 51 to column 21 line 41 does not mention multiple forwarding rules.

The Examiner also states that Dunne teaches "forwarding rules relating to instances of service to which said service interfaces" [sic], in particular at column 6 lines 7-14 and Figures 13 elements 1305 and 1310 which the Examiner states disclose that "the forward list is selected based on the received packet". However, "selected based on the received packet" is not the same as calculating a forwarding rule particular to a service interface. The differences between the claims and Dunne have been extensively argued in response to previous Office Actions, and are discussed above with reference to claim 1.

Claims 2-7 and 11-21 are variously dependent on claims 1 and 8, and include the same limitations discussed above.
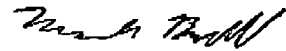
Because the Examiner has not shown where each and every element of claims 1-8 and 11-21 are taught by Yuasa, Dobbins, or Dunne, either alone or in combination, the

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Applicant respectfully submits that a *prima facie* case of obviousness has not been established against claims 1-8 and 11-21.

In view of the foregoing, it is believed that the claims at present on file are in condition for allowance. Reconsideration and action to this end is respectfully requested.

Respectfully submitted,

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